8-port 10/100TX internal power switch

MILAN BY TRANSITION NETWORKS®

MIL-S800i-v2

User Manual

Rev. 1.00

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Regulatory Approval
- FCC Class B
- UL 1950
- CSA C22.2 No. 950
- EN60950
- CE
- EN55022 Class A
- EN55024

Canadian EMI Notice
This Class A digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe A respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

European Notice
Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community Compliance with these directives imply conformity to the following European Norms:

EN55022 (CISPR 22) - Radio Frequency Interference
EN61000-X - Electromagnetic Immunity
EN60950 (IEC950) - Product Safety

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FCC Statement

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not stalled and used in accordance with the instruction, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measure:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CE Mark Warning

This is a class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures

Introduction

The 8-port 10/100TX internal power switch is compact and attractively designed for desktop use. It is an ideal solution for small office or the SOHO network user. This switch provides wire-speed, Fast Ethernet switching function, that allows for high-performance, low-cost connections. The switch will automatically detect the speed of the device that you plug into it, allowing the use of both 10 and 100Mbps device. It features store-and-forward switching and can auto-learn and store source address.

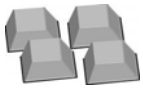
Features

- Conforms to IEEE 802.3 10Base-T, 802.3u 100Base-TX and 802.3x Flow control
- Non-blocking and full wire speed forwarding rate
- Store and Forward switching architecture
- Universal internal switch power
- 1.6 Gbps back plane
- LED on top side of case
- Auto-MDIX on all ports
- N-way Auto-Negotiation
- Back pressure half duplex
- Flow control full duplex
- 768Kbits packet buffer
- 1K MAC address table
- Compact size and wall mount design

Package Contents

- 8-port 10/100TX internal power switch
- Rubber Feet
- Power cord
- User Manual

The 8 10/100BASE-TX Switch



Rubber Feet

Power cord

User Manual

Package Contents

Compare the contents of your switch with the standard checklist above. If any item is missing or damaged, please contact your local dealer for service.

Hardware Description

This section mainly describes the hardware of the 8-port 10/100TX internal power switch.

Physical Dimension

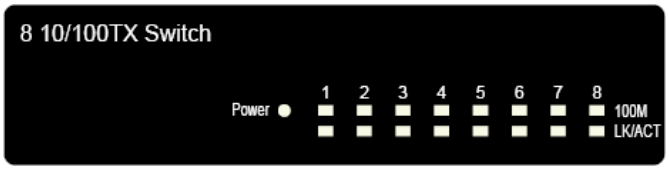
The physical dimensions of the 8-port 10/100TX internal power switch is **165mm(W) X 100mm(D) x 32.5mm(H)**.

Front Panel

The LED indicators are located on the upper cover of the switch. They provide a real-time indication of systematic operation status.

LED Indicator

The following table provides descriptions of the LED statuses and their meaning.

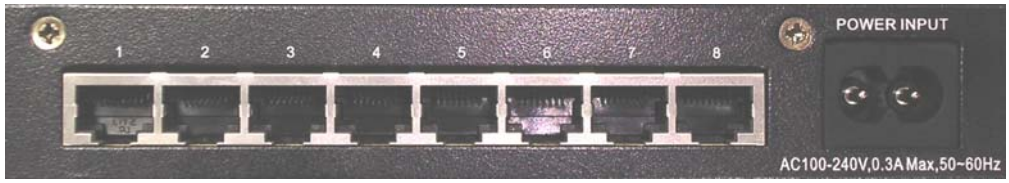


LED	Status	Color	Description
Power	On	Green	The power of the Switch is On

100M	On	Green	The connection speed is 100Mbps
	Off		The connection speed is 10Mbps
LNK /ACT	On	Green	The port is successfully connecting with the device.
	Blink		The port is receiving or transmitting data.
	Off		No device attached.

Rear Panel

The Rear Panel of the 8-port 10/100TX internal power switch consists of 8x 10/100 RJ-45 Ethernet ports and one power connector.



Rear Panel of the 8-port 10/100TX internal power switch

- **RJ-45 Port:** 8x 10/100N-Way auto-sensing for 10Base-T or 100Base-TX connection.

  Auto MDI/MDI-X: Will detect if a straight-through cable is connected to a NIC or cascaded to a hub or switch, without the need to change the cable or connector. The maximum distance between the Switch and another device is 100 meters.

Installation

This section shows the installation procedures of the switch.

Set the Switch on a sufficiently large flat space with a power outlet nearby. The surface where you put the Switch should be clean, smooth, level, and sturdy. Make sure there is enough clearance around the Switch to allow attachment of cables, power cord and air circulation.

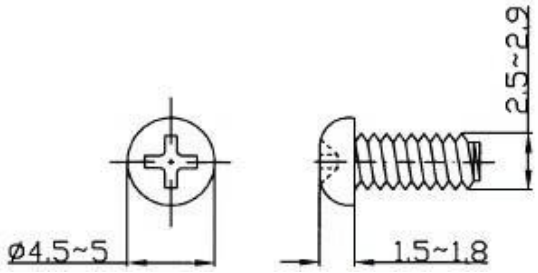
Attaching Rubber Feet

A. Make sure mounting surface on the bottom of the Switch is grease and dust free.
B. Remove adhesive backing from your Rubber Feet.
C. Apply the Rubber Feet to each corner on the bottom of the Switch. These footpads will help protect the Switch from shock/vibration.

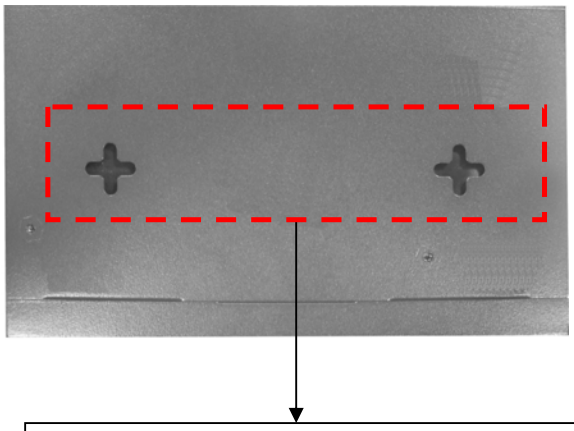
Mounting on the Wall

The switch is designed so it can mount on the wall. The bottom of the switch has two cross hook holes for mounting the switch to a wall. Follow the steps below for wall mounting the switch.

1. Using the screw as the following figure showed. The screws did not include in the package. User needs to provide their own screws.



2. Attach the screws to the wall so they are positioned for the hanging the switch. Do not over tighten the screws; leave some space between screws and the wall.
3. Mount the switch to the screws on the wall.



Using the cross hook hole at the bottom of the switch to mount the switch on the wall

Power On

Connect the power cord to the power socket on the rear panel of the Switch. The other end of power cord connects to the power outlet. Check the power indicator on the upper panel to see if power is properly supplied.

Trouble Shooting

The switch can be easily monitored through panel indicators to assist in identifying problems. This section describes common problems you may encounter and where you can find possible solutions.

- **Diagnosing LED Indicators**

If Link indicator does not light up after making a connection, you may check whether network interface (e.g., a network adapter card on the attached device), network cable, or switch port is defective or not. Be sure the cable is plugged into both the Switch and corresponding device. Verified the proper cable type is used and its length does not exceed specified limits.

- **Power**

If the power indicator does not turn on when the power cord is plugged in, you may have a problem with power outlet, or power cord. However, if the switch powers off after running for a while check for loose power connection, power loses or surges at power outlet. If you still cannot resolve the problem, contact your local dealer for assistance.

- **Cabling**

RJ-45 Ports: Use unshielded twisted-pair (UTP) or shield twisted-pair (STP) cable for RJ-45 connections: 100Ω Category 3,4 or 5 Cable for 10Mbps connections or 100 Ω Category 5 Cable for 100Mbps connections. Also be sure that the length of any twisted-pair connection does not exceed 100 meters (328 feet).

Technical Specification

This section provides the specifications of the 8-port 10/100TX internal power switch.

Standard	IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet IEEE802.3x Flow Control and Back-pressure
Protocol	CSMA/CD
Technology	Store-and-Forward switching architecture
Transfer Rate	14,880 pps for 10Mbps 148,800 pps for 100Mbps
Connector	RJ 45; Auto MDI-X on all ports
MAC Address	1K Mac address table
Memory Buffer	768Kbits
Backplane	1.6Gbps
LED Indicator	Per port: Link/Activity Per port: 100M Per unit: Power

Network Cable	10Base-T: 2-pair UTP Cat. 3, 4, 5 cable (100m), EIA/TIA-568 100-ohm STP (100m) 100Base-TX: 2-pair UTP Cat. 5 cable (100m), EIA/TIA-568 100-ohm STP (100m)
Dimension	165mm x 100mm x 32.5mm (L x W x H)
Operating Temperature	0ºC to 45ºC (32ºF to 113ºF)
Operating Humidity	5% to 95% (Non-condensing)
Power Supply	AC 100~240V, 50~60 Hz
Power Consumption	4.5 Watt (Maximum)
EMI	Compliance with FCC Class B, CE
Safety	Compliance with UL, cUL, CE/EN60950-1